WHAT IS CLAIMED IS:

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1. A video bandwidth signal frequency converter system comprising:

an input signal interface accepting a video bandwidth signal at a first frequency;

an output signal interface passing said video bandwidth signal at a desired frequency; and

a first single sideband mixer coupled to said input signal interface and said output signal interface, wherein said single sideband mixer translates said video bandwidth signal from said first frequency to a different frequency.

2. The system of claim 1, further comprising:

a second single sideband mixer coupled to said input signal interface and said output signal interface, wherein said first single sideband mixer is disposed between said input signal interface and said second single sideband mixer, and wherein said single sideband mixer translates said video bandwidth signal from said different frequency to said desired frequency.

3. The system of claim 2, wherein said different frequency is a higher frequency than both said first frequency and said desired frequency.

4. The system of claim 2, wherein each of said first single sideband mixer and said second single sideband mixer are disposed on a single integrated circuit substrate.

5. The system of claim 2, wherein each of said first single sideband mixer and said second single sideband mixer comprise:

a first phase shifter accepting an signal input thereto and splitting said input signal into at least two input signal components, wherein said at least two input signal components have a predetermined non-zero phase differential there between;

a second phase shifter accepting a carrier signal input thereto and splitting said carrier signal into at least two carrier signal components, wherein said at least two carrier signal components have a predetermined non-zero phase differential there between;

a first mixer accepting a first input signal component of said at least two input signal components and a first carrier signal component of said at least two carrier signal components thereby providing a first mixed signal and a first image signal;

a second mixer accepting a second input signal component of said at least two input signal components and a second carrier signal component of said at least two carrier signal components thereby providing a second mixed signal and a second image signal; and

a combiner accepting said first mixed signal, said first image signal, said second mixed signal, and said second image signal, wherein said first mixed signal and said second mixed signal are substantially constructively combined by said combiner and said first image signal and said second image signal are substantially destructively combined by said combiner.

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6. The system of claim 5, wherein said predetermined non-zero phase differential for said first phase shifter is approximately 90°.

7. The system of claim 6, wherein said predetermined non-zero phase differential for said second phase shifter is approximately 90°.

8. The system of claim 2, further comprising:

a signal amplitude manipulator coupled to said second single sideband mixer accepting said video bandwidth signal at said desired frequency, wherein each of said first single sideband mixer, said second single sideband mixer, and said signal amplitude manipulator are disposed on a single integrated circuit substrate.

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9. The system of claim 8, wherein said signal amplitude manipulator provides signal amplitude amplification.

10. The system of claim 8, wherein said signal amplitude manipulator provides signal amplitude attenuation.

11. The system of claim 1, further comprising:

a filter coupled to said first single sideband mixer accepting said video bandwidth signal at said different frequency and providing attenuation of image signals substantially equal to a difference between system requirements and image rejection achieved by said first single sideband mixer.

12. The system of claim 1, further comprising:

a filter coupled to said first single sideband mixer accepting said video bandwidth signal at said different frequency and providing attenuation of carrier leakage signals substantially equal to the difference between system requirements and carrier leakage rejection achieved by said first single sideband mixer.

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13. The system of claim 11, wherein each of said first single sideband mixer and said filter are disposed on a single integrated circuit substrate.

14. The system of claim 11, wherein said first single sideband mixer is disposed on a single integrated circuit substrate and said filter is disposed external thereto.

15. An integrated circuit frequency translation system comprising:

a first single sideband mixer circuit having a first input and a first output, wherein a signal provided to said first input is provided to said first output at an increased frequency; and

a second single sideband mixer circuit having a second input and a second output, wherein said second single sideband mixer is coupled to said first single sideband mixer, and wherein a signal provided to said second input is provided to said second output at a decreased frequency,

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16. The system of claim 15, wherein said first single sideband mixer and said second single sideband mixer are disposed on a common integrated circuit substrate.

17. The system of claim 15, wherein said first single sideband mixer comprises:

a phase shifter at said first input to split a signal provided thereto and to provide a predetermined phase differential between each split signal.

18. The system of claim 17, wherein said split signals are provided in an in-phase and quadrature relationship with each other.

19. The system of claim 15, wherein said first input comprises an in-phase input and a quadrature input.

20. The system of claim 16, further comprising:

an amplifier coupled to a signal path associated with said first input, wherein said amplifier is also disposed on said common integrated circuit substrate.

21. The system of claim 16, further comprising:

an amplifier coupled in a signal path between said first single sideband mixer circuit and said second single sideband mixer circuit, wherein said amplifier is also disposed on said common integrated circuit substrate.

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22. The system of claim 21, wherein said amplifier provides linear operation substantially only at said increased frequency.

23. The system of claim 16, further comprising:

an amplifier coupled to a signal path associated with said second output, wherein said amplifier is also disposed on said common integrated circuit substrate.

24. The system of claim 15, further comprising:

a filter coupled in a signal path between said first single sideband mixer circuit and said second single sideband mixer circuit, wherein said filter provides attenuation approximately equal to a difference between system requirements and an amount of image rejection provided by said first single sideband mixer.

25. The system of claim 24, wherein said filter is also disposed on said common integrated circuit substrate.

26. The system of claim 15, wherein said first single sideband mixer comprises a substantially fixed frequency carrier and said second single sideband mixer comprises a variable frequency carrier.

27. The system of claim 26, wherein said increased frequency is a frequency above a desired range of video signal frequency division channels and wherein said decreased frequency is a particular video signal frequency division channel of said range of video signal frequency division channels.

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28. The system of claim 26, wherein said system is disposed in a television signal transmission head end circuit.

29. The system of claim 26, wherein said system is disposed in a television cable system neighborhood node.

30. A method of providing a frequency translation circuit comprising:

providing a first single sideband mixer having a first input and a first output, wherein a signal provided to said first input is provided to said first output at an increased frequency; and

providing a second single sideband mixer having a second input and a second output, wherein said second single sideband mixer is coupled to said first single sideband mixer, and wherein a signal provided to said second input is provided to said second output at a decreased frequency, wherein said first single sideband mixer and said second single sideband mixer are disposed on a common integrated circuit substrate.

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31. The method of claim 30, further comprising:

disposing a filter between said first single sideband mixer and said second single sideband mixer, wherein said filter is adapted to substantially rely upon said first single sideband mixer for image rejection.

32. The method of claim 30, wherein said frequency translation circuit provides video head end quality frequency translation, further comprising:

at least one filter having frequency selection characteristics insufficient to independently provide head end quality signal characteristics.

33. The method of claim 32, further comprising:

at least one amplifier having linearity characteristics insufficient to provide head end quality signal characteristics when tones associated with an undesired image signal are present with tones of a signal to be amplified.

34. A method for converting video bandwidth signals from a first frequency to a desired second frequency of a plurality of frequencies, said method comprising:

accepting a video bandwidth signal input at said first frequency;

providing a first carrier having a selected frequency greater than said first frequency and said desired second frequency;

mixing a first component of said video bandwidth signal at said first frequency with said first carrier to thereby provide a first mixed signal and a first image signal;

mixing a second component of said video bandwidth signal at said first frequency with said first carrier to thereby provide a second mixed signal and a second image signal;

combining said first mixed signal and said second mixed signal to thereby provide a high intermediate frequency signal having an amplitude greater than both of said first mixed signal and said second mixed signal;

combining said first image signal and said second image signal to thereby substantially null each of said first image signal and said second image signal;

splitting said high intermediate frequency signal into a first component of said high intermediate frequency signal and a second component of said high intermediate frequency signal;

providing a second carrier having a variable frequency less than said first carrier selected frequency;

mixing said first component of said high intermediate frequency with said second carrier to thereby provide a third mixed signal and a third image signal;

mixing said second component of said high intermediate frequency with said second carrier to thereby provide a fourth mixed signal and a fourth image signal;

combining said third mixed signal and said fourth mixed signal to thereby provide a desired second frequency signal having an amplitude greater than both of said third mixed signal and said fourth mixed signal; and

combining said third image signal and said fourth image signal to thereby substantially null each of said third image signal and said fourth image signal.

35. The method of claim 34, wherein said accepting step comprises:

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splitting said video bandwidth signal input into said first component of said video bandwidth signal at said first frequency and said second component of said video bandwidth signal at said first frequency.

36. The method of claim 34, wherein said step of providing a second carrier comprises:

selecting said second carrier to result in said desired second frequency corresponding to a desired frequency of said plurality of frequencies.

37. The method of claim 34, wherein each of said steps are operable on a single integrated circuit.